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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/747,428	12/22/2000	Neelam N. Vaidya	0007056-0174/P5701NP/ARG/	1488
58328 7590 01/10/2007 SONNENSCHN NATH & ROSENTHAL LLP FOR SUN MICROSYSTEMS P.O. BOX 061080 WACKER DRIVE STATION, SEARS TOWER CHICAGO, IL 60606-1080			EXAMINER AL HASHEMI, SANA A	
			ART UNIT 2164	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		01/10/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	09/747,428		VAIDYA ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Sana Al-Hashemi		2164	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 October 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This action is issued in response to applicant's amendment filed 10/16/06.
2. Claims 1-24 are pending. No claims were added. None were canceled.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

3. Claims 1-24, are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. (Lee hereinafter)(US Patent Application No. 2002/0169788 provisional application filed February 16, 2000).

Regarding Claims 1, 6, 11, and 16, Lee discloses a method for managing a plurality of nodes in a layered hierarchically organized database stored in a server on a computer network comprising:

accessing a subset of said nodes in response to a client request (Paragraph 0282, lines 1-7, Lee);

modifying one or more state attributes associated with said nodes to control merging and updating of layers to a resulting layered hierarchical database in response to said client request,

Art Unit: 2164

wherein the one or more state attributes indicates a last action taken on a corresponding data element (Paragraph 0233-0235, Lee); and

managing said nodes using said state attribute, wherein each one of said state attributes comprises an eXtensible Markup Language (XML) format attribute (Paragraph 0222, Lee).

Regarding Claims 2, 7, 12, and 17, Lee discloses a method wherein said state attributes indicate that a corresponding data element is one of updated default, deleted, and added ((Paragraph 0254, Lee)).

Regarding Claims 3, 8, 13, and 18, Lee discloses a method wherein each one of said state attributes includes a value of one of default, replaced, modified, and deleted, indicating a last action taken on a corresponding data element ((Paragraph 0282, lines 1-7, Lee).

Regarding Claims 4, 9, 14, 19, and 21-24, Lee discloses the method wherein each one of said nodes comprises an XML node (Paragraph 0225, Lee).

Regarding Claims 5, 10, 15, and 20, Lee discloses a method wherein said nodes are organized in a Document Object Model format (Paragraph 0222 Lee).

### ***Response to Arguments***

Applicant's arguments filed 10/16/06 have been fully considered but they are not persuasive.

Applicant argues that the “ the Examiner ha not established that provisional application no 60/182939 support the subject matter relied upon in Lee to reject claims 1-24”

Examiner disagrees. The provisional application does disclose and support the subject matter relied upon in rejecting claims 1-24.

Applicant argues that the Lee reference “fails to teach or suggest ‘ modifying one or more state attributes associated with said nodes to control merging and updating of layers to a resulting hierarchical database in response to said client request, wherein the one or more state attributes indicates a last action taken on a corresponding data element”.

Examiner disagrees. Refereeing to Lee provisional application No. 60/182939 on page 5, 2<sup>nd</sup> paragraph Lee discloses a mapping elements in XML documents into the corresponding relational tables, the algorithm may use the metadata collected during schema migration to establish relationships among relational tables. Also, metadata may be augmented or updated during the data loading process. There are some properties of the data (e.g., physical ordering relationship) need to be collected and maintained in the database, while some metadata may be useful for query processing, e.g., which tables should be joined in order to answer certain queries, which corresponds to the claimed/argued limitation.

Applicant argues that the Lee “fails to disclose a state attribute that ‘indicates a last action taken on a corresponding data element”.

Examiner disagrees. Lee provisional application discloses on page 21, 1.2 Our Approach the 4<sup>th</sup> bullet Lee discloses whenever there is a data update happened at the relational tables, the update is also reflected in the XML documents, and the XML documents are still valid, which corresponds to the claimed/ argued limitation.

Applicant argues that the Lee fails to teach or suggest, “ each one of said attributes includes a value of one of default, replaced, modified, and deleted.”

Examiner disagrees. First of all, the attribute value is inherent in the XML and each attribute includes a default value. Further more on page 23, 5<sup>th</sup> paragraph, Lee discloses a Attribute-list declarations define the attributes of an element type. The declaration includes attribute names, default values and types, such as CDATA, NOTATION, ENTITY, etc.. Two special types of attributes, ID and IDREF, are used to define references between elements, which corresponds the claimed/argued limitation.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

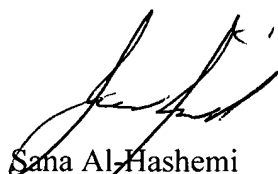
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

*Points of Contact*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sana Al-Hashemi whose telephone number is (571) 272-4013. The examiner can normally be reached on 8Am-4:30Pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Rones can be reached on (571) 272-4085. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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January 4, 2007